SYSTEMS AND METHODS FOR ENCODING REDUNDANT MOTION VECTORS IN COMPRESSED VIDEO BITSTREAMS

Abstract of the Disclosure

The invention is related to methods and apparatus that encode redundant motion vectors for predictive-coded visual object planes (P-VOPs) to increase the robustness of transmitted video signals. One embodiment provides the redundant motion vectors in a user data video packet of an MPEG-4 compliant bitstream, which thereby allows the enhanced bitstream to remain compliant with MPEG-4 syntax and backwards compatible with MPEG-4 decoders. The enhanced bitstreams allow a video decoder to display a video with a better picture and relatively less error and error propagation when portions of the bitstream are disturbed or corrupted by interference, delays, and the like.